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AUTHOR Zimmerman, Joe
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ABSTRACT

This paper illustrates the potential of people to know themselves and to utilize self-change procedures. The author describes attempts by three individuals to monitor their aversive feelings through recording the daily frequencies of these feelings. The frequencies then serve as an inner behavior baseline against which they assess the effect of self-implosion, a treatment process for aversive feelings that exposes the client to highly aversive stimuli via imagery leading to the eventual extinction of aversive feelings. Each individual continued to record frequency of feelings, both during and following the treatment period. The results suggest that persons can modify their own behavior through a systematic personal-management approach which need not be limited to a clinical relationship, behaviors that can be observed by others, or the use of strictly operant-reinforcement procedures. (Author/LAA)

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If It's What's Inside that Counts, Why Not Count It?
I: Self-recording of Feelings and Treatment by
"Self-Implosion"

Joe Zimmerman

Indiana University-Purdue University Indianapolis
School of Medicine

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EDUCATION & WELFARE
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ABSTRACT

Three persons employed wrist counters to self-record the daily frequency with which they experienced aversive feelings. The daily frequencies served as "inner-behavior" baselines against which they assessed the effect of a self-imposed daily-treatment procedure. Each person independently chose to apply "self-implosion" in an attempt to modify his feelings. Each continued to self-record the daily frequencies of his feelings, both during the self-implosion-treatment period and following its removal. The reported results suggest that persons can modify their own behavior by employing a systematic, personal-management approach and that such an approach need not be limited to a) a clinical relationship, b) behaviors which can be observed by others, and c) the use of strictly operant-reinforcement procedures.

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In the context of a recent book review, Mowrer (1972) stated, "I would like to see professionals, not doing therapy or counseling, but rather acting in such a way as to help the laity, at large, learn to 'treat' itself." In the context of "psychologist, heal thyself", this writer has spent the last several years in a self-awareness program making use of personal growth groups and a procedure involving self-monitoring and self-recording of both observable behavior and inner events. A strong conviction has resulted highly compatible with Mowrer's point of view. The position to be taken and supported in this paper is that behavior-change procedures are now available and presently in use by behavioral researchers and therapists which persons can be educated to employ for themselves for the purpose of increased self-awareness, and when desired, behavioral change.

The major purpose of this paper is to illustrate the potential of people to know themselves and to utilize self-change procedures. Three cases will be presented in detail describing the self-monitoring of aversive feelings and the self-application of a procedure uncommon to such situations.

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A perusal of the recent behavior modification literature indicates a growing emphasis on both research and application in the area of self-control, self-regulation and self-reinforcement (see for example the review of Kanger, 1970a; the paper by Kanfer, 1970b; and the text by Watson and Tharp, 1972). In addition, an increasing number of research reports and clinical studies are being published which involve subjects, clients, and students being asked to monitor and quantitatively self-report their own observable behaviors. Among behaviors so monitored and reported, usually in terms of daily frequency or duration, are smoking, eating, studying, school work, dating, expressing oneself to others, nail biting, hair pulling, and stealing (see for example, Stuart, 1967; Duncan, 1969; Roberts, 1969; Lindsley, 1971; McFall, 1970; Johnson and White, 1971; Jackson, 1972; Watson and Tharp, 1972; Epstein and Peterson, 1973; and Ernst, 1973).

The above and similar reports involve work which has been carried out within an operant-reinforcement framework. This approach to self-modification generally

involves having a person identify one or more problem areas with respect to his own behavior. He then chooses a particular observable problem behavior, defines it, and then takes a daily count of that target behavior. The daily behavior counts that he initially takes, usually for a period of a week or more, are referred to as his baseline data. He can then employ his baseline data for the purpose of determining whether a subsequent intervention or self-treatment is actually helping him to change in the desired direction by continuing to take daily counts of the target behavior both during and after the intervention. Self-treatments applied within the operant-reinforcement framework usually involve the application of a positively reinforcing consequence or a punishing consequence, contingent upon the occurrence of the counted, target behavior or of a behavior incompatible with the target behavior.

One of the most significant developments in the field of self-modification via operant-reinforcement approaches was the recent publication of a 264-page textbook on the subject by Watson and Tharp (1972). This important book clearly and thoroughly imparts to its readers methods by which they can observe and then change their own behavior. The publication of the Watson and Tharp book is, in this writer's view, an important step in the direction of helping... "the laity, at large, learn to 'treat' itself".

Watson and Tharp, by their own design, emphasized the self-monitoring of observable behaviors and the use of positive reinforcement for the purpose of self-modification. Other important developments in the literature of behavior modification and behavior therapy suggest that self-modification as a field of study and application can be expanded to include behaviors which others cannot observe and can involve treatments other than self-reinforcement or self-punishment.

First, a number of workers have presented or published reports which describe self-reported data, but in which the self-monitored target behaviors are feelings and/or thoughts. These behaviors, which cannot be observed by others, have been variously referred to as private events (Skinner, 1953), coverants (Homme, 1965), and "inner" behaviors (Lindsley, 1969 and Duncan, 1971). Hereinafter, I will follow my own preference and refer to such behaviors simply as "inners". Examples of inners which have been so monitored and reported, usually in terms of daily frequency, are: sexual arousals, urges to smoke, urges to drink pop, feelings of anger, hate, paranoia, and depression; hallucinations, hostile and friendly thoughts; obsessive, negative thoughts about self and positive thoughts about self; worries, thoughts about ex-wife, and selfish thoughts (see for example Barlow et al., 1969; Rutner and Bugle, 1969; Lindley, 1969 and 1970; Duncan, 1971; Mahoney, 1971; Yen et al., 1972; Ackerman, 1972, and Jackson, 1972).

Second, Homme (1965) in his classic position paper suggested that thoughts, which he called coverants, can be modified with self-reinforcement procedures in the same way that observable operant behaviors can be modified. Indeed, several workers have recently begun to report working with clients' thoughts in an attempt to alter them along the lines suggested by Homme (see for example, Tyler and Straughan, 1970; Johnson, 1971; Mahoney, 1971; and Todd, 1972).

Third, the literature of behavioral therapy is now replete with reports which describe methods for changing behavior which differ from operant-reinforcement methods. Many behavioral therapy procedures are used to treat feelings and thoughts and some of these procedures employ imagery. That is, subjects or clients are asked to imagine that critical events are being experienced. This is in contrast to operant-reinforcement approaches which emphasize the arrangement of consequences following the actual occurrence of observable behavior. Examples of such methods

include desensitization, covert sensitization, thought stopping, covert reinforcement, covert punishment and implosion (see Wolpe, 1958; Cautela, 1966, Cautela, 1969; and Stampfl and Levis, 1967).

Finally, an increasing emphasis on having patients or clients assume some part of the therapist's or counselor's role is beginning to be reflected in the literature of behavior modification and behavior therapy (see for example Goldiamond, 1965; Kanfer and Phillips, 1966; Kanfer, 1970; Lazarus, 1972; and Watson and Tharp, 1972). Although behavior therapists have appeared cautious about placing their procedures in the hands of layman, many do give their own clients homework to perform between therapeutic sessions, and several have recently published case reports in which they describe turning over some or most of the therapeutic operations to specified clients (although usually in precisely directed form). Examples of the latter include Migler and Wolpe, 1967; Davison, 1968; Kahn and Baker, 1968; Rardin, 1969; and Frankel, 1970. Three of these reports describe turning over some or most of a highly specified relaxation training and desensitization program to the client. In addition, Davison (1968) and his client (who was working on eliminating sadistic phantasies) masturbate at home while using nonsadistic sexual pictures and imagery. Frankel (1970) worked with a client who had fears of earthquakes, sexual behavior and enclosed places. The client was treated with implosion on a once a week basis but was instructed to self-implode during the week a) each time earthquake fears occurred and b) three times a day each, with respect to sexual behavior and enclosed places.

The developments described above indicate that a foundation has been laid for a technology of personal management. In an era, the hallmark of which is self-determinism, I would make available to individuals the possibility of expanded self-awareness through the objective monitoring of one's own experience. As a teacher and therapist I expose students and clients to diverse treatment modalities in order to provide them with a wide choice of methods for personal growth and behavior change. The group of colleagues who have most influenced and inspired me are Lindsley (1969, 1970) and his students, and especially Duncan (1969, 1971). This decidedly humanistic-behaviorism group actively teaches, encourages, advocates and practices personal management via self-recording and systematic application and assessment of self-chosen treatments. Their interest is in helping people (from practitioners to layman) to help themselves and others, and they encourage self-recording of all behaviors, both observable and inner, without taking narrow and orthodox positions with respect to specific kinds of treatments.

I am presently involved in a program which encourages students, clients and volunteers to become more aware of their own experiences by self-monitoring and self-recording their own behaviors. I place strong emphasis upon the self-monitoring of inner behavior and upon the observer's own choice of self-modification techniques. I teach self-recording of behavior and the possibility of self-modification in the same way that I teach behavior management of others' behavior. I take an "accountability model" approach. I point out that the critical step in this approach involves obtaining a quantitative daily behavior baseline. In getting such data, one is forced to look objectively and systematically at the behavior he wishes to deal with (you can't realistically count something with defining what it is that you are counting). With the baseline data now available, he can more objectively determine whether he really wishes to change the target behavior, and if he then decides to attempt to change it, he has an objective basis upon which he can assess the effects of a given treatment procedure. The last point is the one which leads me to call this approach an "accountability model". With an objective

quantitative, set of baseline data in the form of daily behavior frequencies, one can then systematically apply a defined treatment to the person whose behavior is to be changed (which might, of course, be oneself) and by continuing to count the target behavior, one can determine whether that treatment is ineffective, effective, or perhaps even psychotoxic with respect to the target behavior. I have applied this model to the modification of work behavior in a sheltered workshop (Zimmerman et al., 1969) and to the modification of observable student behavior in various classroom settings (Zimmerman et al., 1971) and in various other settings. Usually this work has involved teaching supervisors, teachers, and other "people helpers" to apply the model in order to change the behavior of those who they work with. This report is the first in which I describe the application of the model to self-modification.

To date over 200 persons have provided me with self-reported inner data. Over 90% of this population which includes students, volunteers and clients, report increased awareness with respect to the problem area and, more specifically, increased knowledge about the circumstances under which the problem behavior occurs. Among inner behaviors which have been self-monitored are a) feelings of anger, fear, impatience, jealousy, inadequacy, incompetency, insecurity, sexuality and happiness; b) urges to smoke, eat, aggress, assert oneself and express oneself; and c) recurrent or obsessive thoughts such as worries, daydreams, concerns over rejection, failure or potential pain, concern about another person, self-criticism, and ideas which distract one from his present task.

To date, over 75% of the above self-observers have attempted to modify the self-monitored inner behaviors by systematically employing one or more treatments after generating a behavioral baseline. Their results, which are reported in tabular and/or graphic form, show that in approximately 70% of the cases a change of behavior in the desired direction is reported. In many of those cases, such a result is reported after one given self-treatment was applied while in other cases the first treatment had little if any influence on the self-monitored behavior but behavior change was reported to occur following the employment of a second or third self-treatment. Among the treatment modalities which have been selected to date are self-reinforcement, self-punishment, talking to oneself, asserting oneself, relaxation, meditation, asking a friend to serve as "therapist", exaggerating one's feelings or thoughts, giving another feedback about how one is feeling, asking a therapist to apply aversion therapy, telling oneself the worst possible consequences of the situation (using a rational-emotive approach), thought stopping, self-desensitization, and "self-implosion".

The three cases of self-modification that I have selected to report in this paper were not chosen at random. They were selected, in part, because they each demonstrate the self-recording and self-treatment of particularly aversive inner behaviors. In addition, the treatment personally selected by each self-modifier was not an operant-reinforcement procedure. Finally, in each case the treatment selected was a form of "self-implosion", a treatment based upon Stampfl's implosive therapy (see Stampfl and Levis, 1967) and which has been fascinating to this writer for some time. Implosive therapy as a method of treatment for aversive feelings involves the massive exposure of a client to highly aversive stimuli via imagery. The aversive stimuli are presumed to be relevant to the client's feeling problem and their massive presentation is presumed to lead to eventual extinction of the aversive feelings.

Method

Clients, volunteers, students in other instructor's courses and students in the

present author's Psychology courses are given the opportunity to conduct self-management projects under my guidance and particularly encouraged to try an "inners" project (which I have been calling a "precision growth project"). My students are given the opportunity to obtain credit towards completing a course requirement by doing such a project but with the understanding that credit is not contingent upon getting positive results. Students, including Subjects 1, 2, and 3 of the present report, and others who choose to conduct an inners project are given the following instructions:

1. Select an area that you would like to explore and understand better with respect to your inner life (i.e., anger, fear, unproductive headtrips, feelings experienced on the basis of another's behaviors, thoughts about another person, bad thoughts about yourself, etc.).
2. Purchase one or two golf counters or an equivalent counting device(s) and practice counting (and defining for yourself what you are counting) for several days.
3. When you can define for yourself the criterion for counting the inner experience (which includes being able to discriminate its beginning and termination), count it daily for at least 14 baseline days. At the end of each day (or at the beginning of the following day), record the number of times that the behavior occurred, on your data sheet. In addition, record the number of hours that you spent counting (number of waking hours for most counts) and note down any special things that happened that day which might have influenced your count for that day.
4. Choose a treatment which you will apply to yourself on a daily basis in order to attempt to modify the inner behavior. Be sure to carefully define for yourself what the treatment is and how you will apply it. Apply it consistently and continue to count and record the behavior as you did during the baseline period for at least ten days.
5. If the behavior which you are counting changed during the treatment period, remove the treatment and return to "baseline" conditions and again count and record daily as you have been doing for at least ten days. If the behavior did not change during the treatment period, choose a different treatment, define it carefully and again apply it consistently for at least ten days while you continue to count and record as you have been doing.
6. After completing the project, summarize the data in table and graphic form and write a report which includes the definition of what you counted, the description of the treatment(s) that you applied, and a summary of what you learned about yourself.

In addition to these instructions, students and others are given examples of results that other individuals have obtained and examples of treatments that others have used. They are also told that in many cases individuals find that just self-monitoring, per se, leads either to an individual being satisfied with his baseline counts and not needing to attempt to modify the behavior or to a change in behavior even without the systematic application of a self-treatment. In such cases, students are encouraged to summarize what they did and learned by simply taking an inner baseline and then to count a different inner behavior. I am also available to all self-observers for purposes of discussing their projects and brainstorming about possible treatments when they have trouble formulating one, or when they wish to have several treatments suggested for their consideration. Other than the above, they are pretty much on their own in choosing what they wish to count and what treatments they choose to employ.

The three projects which will be reported below were conducted by students in

my courses. Each involved the self-monitoring of particularly aversive inner behaviors. The first was completed several semesters before the latter two were conducted. The student (S_1) who conducted the first project independently devised her treatment on the basis of having done a term report on behavioral therapy. Her self-treatment was her own rendition of Stampfl's implosive therapy as applied to herself and can best be described in the context of describing her project. The students who conducted the latter two projects, independently chose to employ "self-implosion" after completing their baseline data, but it should be pointed out that they both had been acquainted with S_1 's project prior to starting their projects. The additional characteristic that each of the three projects shared in common was the fact that each included much specific information about what was learned and experienced as the projects were conducted.

Project I

The first project was conducted by a female, S_1 , who was 22 years old. At the time that she conducted this project she had been married for three years but had been separated from her husband for about a year and was in the process of divorcing him. She reported that she was extremely sensitive to certain important people in her life and that this sensitivity was often experienced in the form of a painful feeling. S_1 decided to tackle this particular inner problem after preparing and giving a report on behavior therapy in her Psychology course. She chose to work with her "hurt feelings" because they had been with her for many years, because of their subjectively high frequency, and finally, because of the ease with which she believed she could detect them. She reported that when she was in contact with people who were important to her, their behavior often preceded her experiencing a "hurt feeling" in the form of a severe cramp or ache in an extremity¹.

S_1 purchased a wrist golf counter and took a 16-day baseline of her hurt feelings. She counted these feelings each day over all her waking hours. The baseline counts are presented in the first panel of Fig. 1. The daily counts varied

Fig. 1 about here

from zero to six with a median value of $2\frac{1}{2}$ per day. She reported that over this baseline period she became acutely aware of the circumstances under which this feeling was elicited. Situations which led to this feeling always involved a person whose approval she sought and usually involved a person who she was close to or whose influence was or had once been important to her (i.e., estranged husband, roommate, boyfriend, parents or brother). The severity of the hurt feelings appeared to be subjectively related to how close she felt to the person. Finally, the trigger to a hurt feeling was usually something one of these important people did or said to her. An aspect that most of these incidents had in common was that she perceived the behaviors or statements as being rejecting of her or of some component of her behavior. Examples of incidents which triggered her "hurt feelings" are a) when

¹The specific location is not given by request of S_1 .

her mother or brother questioned specific decisions or behaviors, "in light of her obvious intelligence", b) when her roommate asked her not to be around for a while in a harsh manner, c) when her ex-husband questioned her dating while she was separated, or implied that the separation was her fault, and d) when her boyfriend failed to meet her as planned, or when she learned that he flaunted the fact that he dated others to some of her acquaintances.

S₁ applied "self-implosion" as her treatment for her hurt feelings. That is, when a situation led to her feeling hurt, she counted the feeling and then she took herself away as soon as she could to a place where she could be alone. She then fantasied the worst possible consequences of the situation which just triggered the hurt feeling. For example, when her brother questioned her maturity and teased her about not wishing to live alone, but rather to live with a female roommate, she experienced the hurt feeling, counted it and as soon as she could be by herself she "self-imploded". She fantasied herself remaining single, taking a female roommate, being unable to get along with the roommate, (the brother's remarks not only led her to feel hurt but also to question her ability to sustain a relationship with someone of her own sex), fighting with her, having the roommate scream and insist that they had to split up, finding her self all alone with no one wishing to share an apartment with her, and finally seeing herself grow old and all alone with no one wishing to live with her. As another example, when her boyfriend flaunted his dating others to some of her acquaintances, S₁ experienced the hurt feeling after being told of this, counted it, and immediately self-imploded. She fantasied marrying her boyfriend, becoming dependent upon him, and she experienced his recurring failure to come home on many evenings, saw herself returning home one evening and finding him with another woman with the two of them making love, fighting with him, asking him to divorce her, and finally finding herself all alone again. In each instance she continued to fantasy until the hurt and pain began to diminish. When this happened after only several minutes in a fantasy, she continued to fantasize about other hurtful situations which she feared and caused her pain. The additional situations most usually involved themes of being rejected by people and having another divorce.

The second panel of Fig. 1 presents the daily counts of hurt feelings which she experienced and treated with self-implosion over the 12-day self-treatment period. The data show that over the first six days of self treatment, the frequency of hurt feelings increased compared to the final nine days of baseline. She reported that her experience was that in the first few days of self-treatment, the fantasies left her more sensitive to criticism and less resistant to the behavior of others with respect to being sensitive to them. As a consequence, the hurt feelings increased in frequency. As she continued to apply this treatment (her determination remained because of her belief that this procedure could do the job), the frequency of the hurt feelings began to decrease. After 12 days, she was comfortable with the results of her self-treatment since in addition to the fact that the frequency was beginning to decrease, she found that the intensity and duration of these feelings were diminishing markedly. During the following 14 days she removed her self-treatment while continuing to count instances of hurt feelings. The third panel of Fig. 1 shows that over this 14-day period she never experienced more than two hurt feelings a day, and the daily average dropped to well below one each day. Finally, after not counting for a period of 15 days, S₁ took counts for an additional 13 days. Fig. 1 shows that over these final 13 days she again never experienced more than two hurt feelings a day and the daily average remained below one. She also reported that these feelings remained less intense and of shorter duration than

those which she suffered prior to starting this self-modification project. She pointed out in her conclusions that those people whose actions triggered her hurt feelings, "aided unknowingly in my therapy". Though I would be hurt and anxious about the feelings of rejection that their comments or actions elicited in me, I was never truly rejected in implosion or in reality. Therefore, the primary reinforcer was missing and extinction began to occur".

A follow-up interview was conducted with S₁ approximately 1½ years after she completed her project. She is now happily remarried and although she reported occasional instances of the hurt feelings, she stated that they are of extremely low frequency and that their intensity and duration has for the most part remained decreased over the period which followed her completion of the project.

Project II

The second project was conducted by a male, S₂, who was 21 years old. At the time he conducted his project he had been going with a girl who he had met two months earlier and who he described as, "a beautiful person, not just physically, but inside as well". He stated that his problem involved his being beset with daily feelings of jealousy in her presence, and daily distrustful thoughts, which immediately started after he left her for the day. Because he believed that these tormenting inners were a function of his recent previous history with females, it may be important to briefly summarize this history as he reported it. S₂ started dating at the age of 15 and reported that he dated approximately once or twice a week for the next five years without even forming a close relationship with any of the many girls he dated. With few exceptions he dated a female from one to three times and then "moved on to someone else". In spite of this cautious pattern of dating he stated that he had never been turned down for a date nor had he ever been stood up! He reported that the first major change in this pattern occurred when he was 20 and met a woman who he dated for three months. He described the relationship which developed as one which involved warmth and mutual understanding. After three months, however, he called her and was informed that she would no longer be able to see him since she was engaged to be married. She further informed him that this was not a recent development but that she was engaged all along. S₂ felt used and hurt. He returned to his old pattern of not getting involved and not looking for a woman with whom to start a close lasting relationship. However, he indicated that he did not close himself to the latter possibility. Indeed, about six months after the previous experience of being hurt by a woman, a very similar experience occurred. He met and dated a woman and continued to see her on a regular and frequent basis for over two months. He again described this relationship as involving warmth and reported that he felt very close to this woman. One day she called him, however, and told him that she had been using him and was about to take off and join and perhaps marry her lover in California. She had been thinking about her lover throughout her relationship with S₂. S₂ reported that this had been a relationship in which he had invested as much as he ever had in any relationship, and truly felt used since she had obviously, merely been playing.

After two rather traumatic experiences with females, S₂ found himself in a rather shaky position with respect to risking further close relationships with the opposite sex. No sooner had he decided, however, to return to his previous pattern of dating casually, and not getting involved, when it happened! To quote S₂:

"I met a girl in one of my classes. We talked for a while and I asked her out.

She was different from any other girl I had ever dated. She was interested in me without being restrictive. She was participative and not demanding. She understood me and what I wanted and needed in a relationship. I found that I wanted to be with her all the time. I was totally preoccupied with her. I fell in love with her and her with me.

Our relationship had a very slow and cautious development because of my anxieties that something would happen which would sever it, like the others. When I was with her I felt as if sometimes she was not really with me. I was extremely jealous of her around other fellows. When I was away from her I questioned the sincerity of the emotional feedback she had given me. In essence, I did not trust her."

After two months, S_2 's third significant relationship developed to the point where the two of them were talking about the possibility of becoming engaged! Unfortunately, in spite of his warm, loving feelings with respect to his present girlfriend, S_2 was also experiencing extremely aversive feelings with respect to her. She was very popular and had many friends, some of whom were male. He stated that he undertook an inners project because a) he had been experiencing uncomfortable feelings of jealousy and thoughts of distrust for six weeks, b) he was certain that his recent history had something to do with these, and c) the continued occurrence of his jealous feelings would certainly not enhance his relationship with her since he was not ready to disclose these feelings to her and he tended to be quiet and sulk when they were experienced.

S_2 described his feelings of jealousy in his girlfriend's presence as "feeling myself tighten up inside; my breathing became very deep and irregular, and I would feel shakey and nervous." He also indicated that every night after he saw her (which was just about every night) he had a 40-minute car trip back to his home and found himself having many distrustful thoughts during this period and at home until he fell asleep.

S_2 purchased two golf counters. He separately counted his jealous feelings in his girlfriend's presence on one counter over all the hours that he was in contact with her. He did not click this "feeling" counter when she was next to him if he had a jealous feeling at the moment, in order to avoid discussing the procedure. (When she asked him what the counters were for, he told her that he was counting cigarettes and times he avoided doing chores). Instead he counted the feeling on his counter as soon as he was in a separate room. In addition, S_2 counted the number of distrustful thoughts that he had about his girlfriend during the period when he left her each night until he fell asleep. Each new distrustful thought that appeared was entered as a separate count.

A baseline of both behaviors was taken by S_2 for 14 days. The first column of Fig. 2 presents the baseline results. Distrustful thoughts occurred with a fre-

Fig. 2 about here

quency of from zero to 12 in each daily counting period. The median frequency was $5\frac{1}{2}$ indicating that S_2 was very much preoccupied with distrust. Jealous feelings in his girlfriend's presence were reported to occur with a frequency of from zero to over 2.5 per hour. The median frequency was slightly under one per hour.

In the process of taking baseline counts of both jealous feelings and distrustful thoughts, S₂ found that he was getting a crisp and sharp look at what was triggering them. Examples of incidents which triggered his jealous feelings (and also served as content for his distrustful thoughts) were when a male friend of his girlfriend came by, dropped off a note or wrote a letter, called her by phone, or when she talked about this or, more generally, about former (ex) boyfriends. Going to parties together was especially "productive" with respect to both counts. Upon leaving her in the evening he found himself questioning her real feelings about him and distrustfully going over conversations they had. He used the incidents which triggered the jealous feelings as bases for not trusting her.

After the 14-day baseline period, S₂ decided that perhaps the most promising approach to attempting to deal with his most uncomfortable and aversive inners was to employ self-implosion. During the last 15 minutes of each day, he went into fantasies which put him into the "most paranoid, hyper-sensitive state I have ever experienced". The first several times he self-implored he found himself so physically involved that sessions lasted far more than 15 minutes, and so he obtained a common kitchen timer and set it for 15 minutes. The loud bell took him out of his "trance". Each nightly "trance" began with S₂ starting off with a review of the day's events with respect to his relationship. He asked himself what happened that seemed threatening, dwelt on the most threatening incident making it come alive as vividly as possible, and then proceeded on to imagine the worst possible consequences of the incident. For example, his girlfriend and an ex-boyfriend who kept trying to convince her via phone to go with him again. S₂ often worried about him and he was frequently the trigger of a jealous feeling and frequently was involved in the content of S₂'s distrustful thoughts. One implosion trip which involved this "rival" (who we shall call "Homer") occurred following the latter's call to S₂'s girlfriend. S₂ imagined that "Homer" was on his way to see his girlfriend just as S₂ left her one evening. He then imagined that this had been arranged, in advance, by the other two. He saw them going off someplace and having a good time dining, dancing and conversing. S₂ then saw himself going back to her house later and seeing evidence of "Homer's" having called in the form of his name being scribbled on a pad by the phone. Then his girlfriend sat S₂ down and said, "I am questioning my feelings for you and I am interested in "Homer" again." S₂ vividly saw her say this coldly and seriously.

S₂ actually found himself crying and thrashing his arms and legs at this point in the implosion trip, and similarly in others. He often found himself ending such a trip by attacking "the male" who was usually the villain in his trips. This attack was often the termination of such a trip.

S₂ reported that after just four or five daily sessions of self-implosion he could already feel the difference. Figure 2 shows that with the exception of one day, after the fourth day of self-treatment S₂ found that the daily frequencies of his jealous feelings were considerably lower than the baseline average. The one exception was on the seventh day of treatment when "Homer" did his thing on the telephone. Interestingly enough, only one distrustful thought occurred on that day and this incident was, of course, the basis of S₂'s self-implosion that night. Similarly, his distrustful thoughts dropped to a daily frequency of zero or one by the fourth treatment day and remained at that level throughout the remainder of the project.

Treatment was removed after 12 days and S₂ continued to count both jealous feelings and distrustful thoughts for an additional ten days. He stated that although nothing different was observed about their social behavior (seeing other

people, and his girlfriend talking about other males), over the final ten-day period he counted only one distrustful thought and the frequency with which he experienced jealous feelings remained much lower than baseline average (see third column of Fig. 2). S₂ also mentioned that although he occasionally still experienced such feelings at this² time, they were of much weaker intensity and lasted only a brief period of time.

In his summary of the project S₂ stated that when he is away from her now, his thoughts about her are more daydream²-like in quality. He thinks about her rather than worrying and questioning her feelings. The two are more open now and can discuss more about each other and their other friends with less inhibition. He is thinking optimistically about their future together, he trusts her and believes what she tells him and they can discuss in depth their exact feelings about other members of the opposite sex. The improvement in communication does not account for the change in S₂'s inners. Although he noted in his report that by the end of the treatment period his girlfriend discriminated a change in his sulking behavior, he reported (in a six-month followup interview) that he began to disclose to her what he had been doing and talk about his previous dating history only after he concluded the counting part of the project. In the six-month followup he also stated that he rarely has distrustful thoughts about his fiancée (they were engaged a month after the project was terminated) and that the occasional jealous feelings which he experiences are of weak intensity, short duration and are usually directed to a male rather than to his fiancée. Finally, the two of them are married now!

Project III

The third project was conducted by a 41-year-old, female teacher who had been driving a car for 23 years. The problem she wished to work on by doing an inner project involved intense and frequent feelings of anxiety while driving in traffic. In order to put this problem in historical perspective I will briefly review her driving history as it appears to relate to her problem. Although S₃ describes herself as "normally anxious", she was comfortable with driving for the first 20 years. A little over three years before conducting her project she was involved in a "traumatic" accident. She was crossing an intersection with the right of way hers, when a driver ran a stop sign (two-way stop sign intersection) and S₃ ended up crashing into the other car. Neither S₃ nor her daughter, who was in the car, were badly hurt but the car was seriously damaged and S₃'s confidence was seriously shaken. Since that accident S₃ continued to drive "out of necessity", but with frequent feelings of anxiety, and with great caution, especially on approaching intersections. What exaggerated her problem and had her wondering about seeking professional help was the fact that after 13 years of not teaching, she sought and obtained a teaching job, but this job involved driving daily 14 miles, each way, mostly via interstates, to get to the school. For 1½ years prior to conducting the present inner project, S₃ indicated that she had been teaching and suffering from intense and frequent anxiety while driving. She woke up tense and feeling ill each school day and reported that driving discomfort even increased during weekends compared to before she had returned to teaching.

S₃ took a 15-day baseline count of daily feelings of anxiety while driving. She described these feelings as involving "grabbing, tightening and painful sensations in the pit of my stomach" together with a marked general increase in tension throughout her body. She counted driving anxieties daily, seven days a week, and although she did not report driving time per day, she indicated that she drove at least two hours per day on school days and at least one or more hours per day on

non-school days. Her baseline counts are presented in the first panel of Fig. 3 which shows that S₃ counted from three to ten daily episodes of driving anxiety and

Fig. 3 about here

that the median frequency was 5½ anxieties per day. Although she reported that the daily counts decreased after the first seven baseline days, they stabilized to between four and six a day over the final eight baseline days. S₃ was able to precisely pinpoint the kinds of incidents and stimuli which triggered her feelings of anxiety as a consequence, in part, of the taking the baseline counts. Among these were drivers following too closely in back of her, S₃ approaching a traffic light which had been green for a while, approaching stop sign intersections and seeing cars approaching stop signs, approaching complex intersections with three or four streets converging, getting on a ramp leading to interstate traffic, approaching exit ramps leading from interstates, slowing down when preparing to get off interstates and seeing a car in back not slowing down, being passed on the right side, etc.

Just prior to completing her baseline, S₃ requested a trial of self-implosion. She wished to employ self-implosion as her treatment (she had learned of this earlier in the course she was taking with me) but she wondered whether I could show her how to do this before she tried it on her own. I suggested a fantasy in which she imagined herself driving in traffic and then having a close call in which a driver cut in front of her. She reported feeling anxious. I asked her to imagine then that she had actually crashed into the car that cut in front of her with both cars going out of control and turning over. Both she and the other driver are badly hurt, writhing in pain, bleeding profusely from mouth, nose, ears, etc. After this, I asked S₃ if she still wanted to try to do this herself and she indicated that she was ready to try anything that might help her traffic-anxiety problem. I suggested that over the self-treatment period she continue to count her anxieties as she had been and that she choose a particularly anxiety-provoking incident each day to work on that evening. That is, I suggested that she go into a daily fantasy at home in a safe quiet place and begin with the worst incident of the day and imagine vividly that it is taking place again and then really get into the worst possible consequences of the incident. Although I suggested that S₃ apply self-implosion away from where the action was, she decided on her own that she would apply self-implosion while actually driving and experiencing her anxiety! Thus, over the eight treatment days, each time a traffic incident occurred which triggered anxiety, S₃ immediately counted the feeling and then and there went into an implosion trip! As each incident and feeling was experienced, she would say, "All right, it really happened, and therefore...." and she would then continue for some minutes (untimed) to imagine herself experiencing the effects and results of the incident in terms of the worst

²I have no doubts about the advice that I would have given had I known that this were her plan. I would have cautioned against this and taken no responsibility. But S₃ was really the one who took the responsibility and this was her self-modification project!

possible consequences. Thus she "experienced" injury to herself and others, damage to cars, effects on her family of her being in the hospital, loss of her job, etc. following each time she experienced and counted an anxiety.

Figure 3 shows that on the first day of treatment, S₃ counted five episodes of anxiety and, thus, went on five implosive fantasies. She³ reports that, thereafter, there was a marked decrease in the number of anxiety episodes. By the fifth day of self-treatment the daily frequency dropped to one and remained low over the final four treatment days. In the latter part of the treatment period, S₃ not only experienced a relief from tension and anxiety but actually began to feel exhilarated by her freedom from tormenting anxiety and tension, and found herself "no longer sitting stiffly forward but beginning to relax against the seat of the car". S₃ terminated the treatment after nine days, and counted for an additional seven days without further treatment. Over this final seven-day period, the number of daily anxiety feelings counted varied from zero to two with a median of zero! She remained far more relaxed over this time and no longer awoke with tension and apprehension. She also reported that she had begun to listen to the car radio again after not doing so for over three years. Apparently over that period the thought of playing the radio made her nervous because she felt it would distract her and help cause another accident.

In an eight-month followup interview S₃ reported that she continues to be comfortable driving her car. Instances of anxiety still occur but they are infrequent and follow only a really close call in traffic. She also reports that she is quite at ease driving on the interstates and has been at ease since the termination of her project even though the weather became much worse after the project was concluded (the project was conducted in the Fall).

Summary and Discussion

The particular self-modification projects presented in this report were used to illustrate the approach that I have been taking and teaching others with respect to self management. These three projects illustrate that this approach can be taken outside the clinical context, can be applied to inner behaviors, and can utilize therapeutic procedures which are not operant-reinforcement procedures.

The particular data described here raises some theoretical questions. First, can we believe the subjects' self-reports? I can only indicate that the same issue obtains even with respect to believing "pure" research data. A reader is not obligated even to trust data which has been copied from automated counters. In the case of people I work with, I endeavor to avoid placing them in a conflict of interests. Neither my approval nor credit towards a course requirement is contingent upon the specific nature of the results which are reported.

Second, can we accept self-recorded data since we cannot check its reliability? Simkins (1971) indicates that reliability has not been demonstrated for data which is self-recorded, and he goes on to say that studying self-recording as a procedure, per se, cannot be logically undertaken until such methodology is developed. Simkin's views are well taken with respect to conducting basic or applied research, when self-recording serves as either the dependent or independent variable. While I await with interest developments in this area, I will not let the absence of such developments deter me from exploring what I consider to be one of the most potentially important methods of "people-helping" available at this moment.

Third, in the case of the data presented in this report, even if we accept the self-recordings of S₁, S₂ and S₃, what proof is there that the aversive feelings were

modified by "self-implosion", per se? The fact is that we have no proof! Self-recording has been shown to be a reactive measure (see McFall, 1970, for example) and it is quite possible that S_1 , S_2 and/or S_3 might have obtained the same final results by merely continuing to self-record. ³ Indeed, many of the people who have taken self-recordings for me and for others (for example personal communication from Lindsley and Duncan) have reported that self-recording per se, was all they needed to modify their behavior. This may, of course, mean that "insight" did the job, but what it often seems to mean is that changes were made in behavior as a result of self-recording which were never "formally" called "self-treatment".

With respect to the specific data presented in this report and the specific treatment employed, several additional observations may be pertinent. First, all subjects had a history of trauma with respect to the inners they respectively worked on. S_1 was in the process of obtaining a divorce, S_2 had been "used" and badly treated by the first two females that he had substantial relationships with. Finally, S_3 had been involved in a major traffic accident. Second, the aversive feelings which were self-recorded had been experienced by the three subjects as being with them for "as long as I can remember", two months, and three years, in the case of S_1 , S_2 and S_3 , respectively. Three subjective reports, together with the fact that the ² frequencies did not decrease over the baseline period (with the partial exception of S_3 's data) suggest that something about their self-treatment may have helped each subject. Just what that something is, I will leave to other investigators. The question about whether implosion works in the first place, and if it does, what is necessary and sufficient, needs much more research, as Morganstern (1973) has pointed out in his review.

The present writer is not invested in any particular method of self-treatment. I have chosen to present three projects which made use of self-implosion because a) this particular treatment differs from operant-reinforcement treatments, b) has not been used in this kind of situation previously, and c) is not the kind of self-intervention that one would predict individuals would employ for themselves in an effort to modify their behavior. My investment is in contributing to the development of a methodology of self-management. I am concerned with teaching people to help themselves by knowing themselves better and by learning how to attempt to change when they are ready to do so.

In a sense, all of us are potential patients to the extent that we all sometimes encounter difficulties with either productivity or interpersonal relationships; and/or aversive feelings such as anxiety, incompetency, worthlessness, helplessness; and/or tormenting thoughts, such as self-doubts, obsessive worries, self-punishments and the like. In contrast, few of us have either the time, money or courage to actually seek help from a professional therapist. Our solution is all too often to escape from our personal problems through drugs, thinking about other things, or getting involved in time-consuming, attention-diverting activities. Yet it is obvious that all too often this "solution" is temporary, at best, while at the other extreme it can lead to consequences such as physical illness, alienation from others, depression, "nervous breakdown", institutionalization, and sometimes to the ultimate cop out, suicide.

The major alternative to such flight today, is, of course, to seek professional assistance with one's personal problems. Those of us who have the time, money and courage to do so have a wide variety of therapists to choose from. We can invest in long term psychoanalysis in an attempt to slowly gain self-knowledge and concomitant behavior change; invest in short term behavior modification or behavior therapy in an attempt to rapidly gain new behaviors and/or lose old behaviors; or we can work with people who represent all shades in between these two alleged extremes. Those of us who choose to spend our money for such services are displaying our disposition to learn about ourselves and perhaps "be changed" by or with the

help of an expert. But those of us who avail ourselves of such help soon learn, if we didn't know this to start with, that there are few magical paths to change. Most therapists will agree that when a client purchases his services without expecting to take an active role in the therapeutic process, little can be expected in the way of behavior change. Getting to know ourselves and taking risks by engaging in new behavior is accomplished, at least in major part, by our own efforts.

One issue confronting all of us in the business of helping people to help themselves is the fact that many people are unwilling to seek help from others. A second issue is that even many who are willing to do so may not be willing to take an active part in learning about themselves or in attempting to change their behavior.

One solution to this state of affairs has been suggested by Mowrer (1972) and stated in the opening sentence of this report. Educating the public to treat itself today, however, appears to be as much a fantasy as a potential reality. Individuals would have to be willing to look at themselves before the issue of treating themselves becomes a feasible occupation. They would then have to be taught methods of objectively gaining self-knowledge. Those who are then ready to attempt to change themselves, would have to acquire information about ways in which this could be implemented. Finally, they would have to learn how to determine whether a treatment they seek out and/or apply to themselves is indeed leading to a change in the desired direction.

It is this writer's conviction that Mowrer's idea can be turned into a feasible plan by first educating individuals about the existence of a technology of self-management. Individuals who are not ready to seek the help of others might be willing to learn to self-monitor their own behavior. Teaching people to objectively observe themselves through quantitative self-monitoring of their own behavior could be an effective first step in the direction of teaching people to take an active role in working with themselves and their behavior problems. In the process, individuals can also examine the conditions under which the self-observed behavior occurs. Individuals who have learned to look at themselves objectively, may then be ready to consider self-modification under the minimal guidance of a teacher, counselor or therapist. Data which an individual has obtained by self-monitoring can serve as a baseline against which he can assess the effects of a treatment which he applies to himself. Data which obtains during and after the self-application of a treatment can provide him with accountability with respect to the treatment he so applies.

Similar considerations obtain with respect to a person who chooses to work with a professional therapist. Self-monitoring can be employed by an individual either before he decides to employ a therapist or can be taught the individual by his therapist. The client who is actively self-monitoring his behavior is, as stated earlier, already taking an active role in his therapy. In addition, self-recorded data can serve as a baseline against which the client-therapist interaction can be assessed, at least with respect to its effects on the self-monitored target behavior. Thus, accountability can be applied to the client-therapist interaction. Finally, self-monitoring can be of considerable aid to the therapist, beyond the above considerations. Data obtained by the client can be useful in providing the therapist with far more precise information about the conditions under which problem behaviors occur. For example, "It was a bad week, Doc" could be replaced by, "last week I had 10 anxiety attacks and here are some of the specific events that precipitated them."

There is little doubt that the emphasis on self-recording will continue to grow both in the literature of behavioral change and in the practice of eclectic therapists. In the Introduction I gave only a relatively small number of examples of

recent reports in which researchers, therapists, counselors and teachers are asking people to count their own behaviors. In the case of many workers, self-recording is considered to be, at very least, a method of helping the researcher, therapist or counselor gain more information about his subjects, clients, or patients. (See Kanfer, 1970b, for a further discussion of clinical applications of self-monitoring). In the case of this writer and others (i.e., Lindsley, 1969, 1970; Duncan, 1969, 1971; and Watson and Tharp, 1972) self-recording can offer the public much more than that. In this report I have tried to suggest and illustrate some of its potentialities.

In summary, my major purpose has been to illustrate my approach to helping people help themselves. I see this approach as differing considerably from a more conventional behavior modification approach. Like Lichtenstein (1971), I believe that "In order to broaden behaviorism so that it may embrace phenomenological events, it is necessary to accept self-observation". Like Jacobs (1972) I now believe that a "holistic" approach which involves the possibility of dealing with feelings, thoughts and expressive behavior is the only one which will cover all the possible problems that people go to therapists for. Like Lindsley, Duncan, and Watson and Tharp, I believe that methods for personal management can be turned over to the individual.

Figure Legends

- Figure 1 Number of hurt feelings per day as reported by S_1 under baseline conditions, self-implosion-treatment conditions, and following the removal of treatment.
- Figure 2 Daily number of distrustful thoughts after leaving his girlfriend (X) and rate of jealousies per hour in her presence, as reported by S_2 under baseline conditions, self-implosion-treatment conditions, and following the removal of treatment.
- Figure 3 Number of traffic anxieties per day as reported by S_3 under baseline conditions, self-implosion-treatment conditions, and following the removal of treatment.

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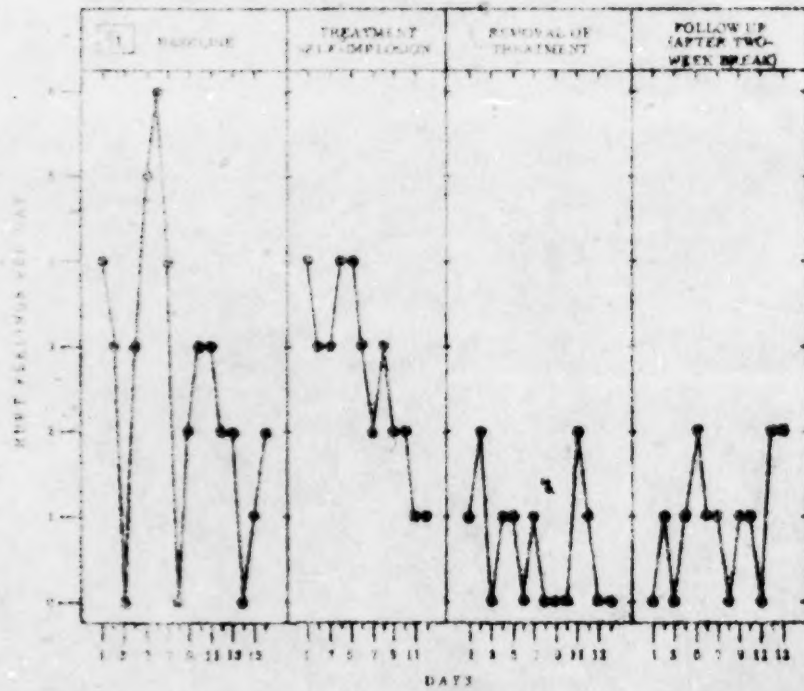


FIG 1
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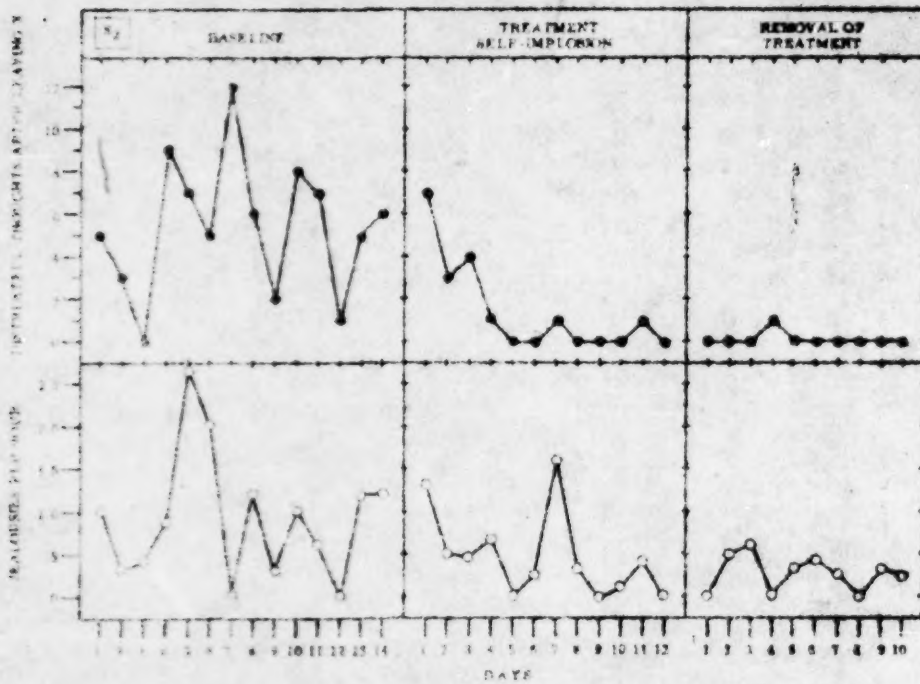


FIG 2
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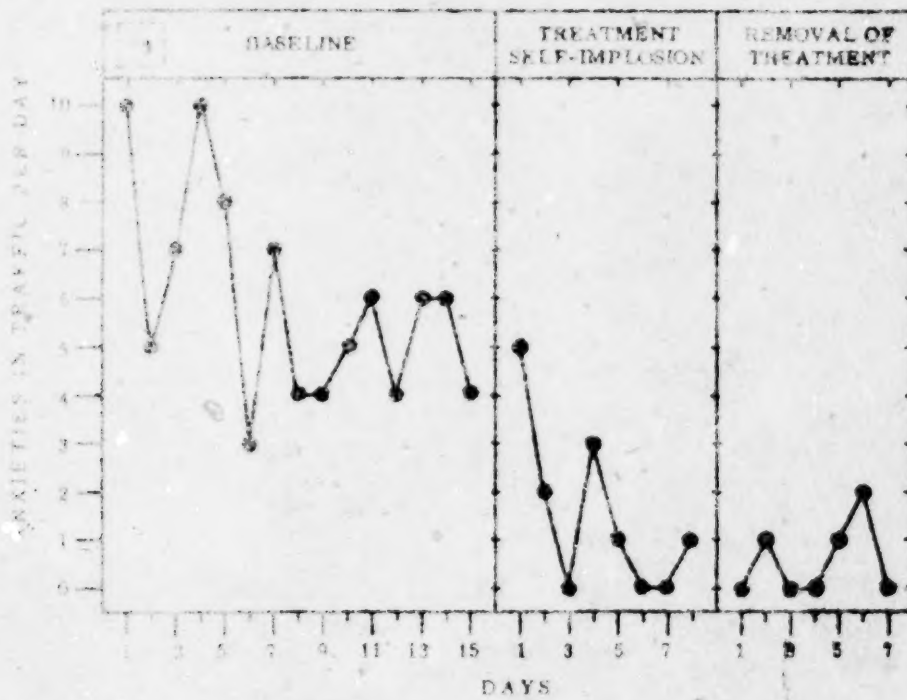


FIG 3

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